

PATENT COOPERATION TREATY

Rec'd 15/PTO 16 DEC 2004

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

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NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

29.10.2004

Applicant's or agent's file reference
P/63091/GPTU63

IMPORTANT NOTIFICATION

International application No.
PCT/IB 03/02712

International filing date (day/month/year)
27.05.2003

Priority date (day/month/year)
06.06.2002

Applicant
MARCONI COMMUNICATIONS GMBH et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P/63091/GPTU63	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEAA416)	
International application No. PCT/IB 03/02712	International filing date (day/month/year) 27.05.2003	Priority date (day/month/year) 06.06.2002
International Patent Classification (IPC) or both national classification and IPC H01P1/26		
Applicant MARCONI COMMUNICATIONS GMBH et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 12.12.2003	Date of completion of this report 29.10.2004
Name and mailing address of the international preliminary examining authority: <div style="display: flex; align-items: center;"> <div> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 </div> </div>	Authorized Officer La Casta Muñoa, S Telephone No. +49 89 2399-2340



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 03/02712**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-12 as originally filed

Claims, Numbers

1-22 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/B 03/02712**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-22
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-22
Industrial applicability (IA)	Yes: Claims	1-22
	No: Claims	

2. Citations and explanations

see separate sheet

Section V. Reasoned statement Under Article 35 (2) PCT

1. Reference is made to the following documents:

D1: US 2002/000894 A1 (TANIZAKI TORU ET AL) 3 January 2002 (2002-01-03)
D2: EP-A-0 622 840 (NIPPON ELECTRIC CO) 2 November 1994 (1994-11-02)
D3: WO 02/12916 A (RAYTHEON CO) 14 February 2002 (2002-02-14)

2. The subject-matter of claims 1 and 11 does not involve an inventive step within the meaning of Article 33(1) and (3) PCT.

- 2.1 With reference to Fig. 6 and paragraph 81 discloses a microwave circuit comprising non radiative dielectric lines, in which a removable, reflection free termination is provided (terminal resistor 54, see par. 81, lines 11-12). The subject-matter of claim 1 differs from the circuit of D1 in that the circuit is integrated and comprises microstrip lines. Such a difference is not considered to involve an inventive step, as it would be obvious for any microwave engineer to implement the circuit of D1 with microstrip transmission lines in a RF MMIC circuit, such as for instance is known from D2, according to the circumstances, such as for instance a lower frequency of operation.

Additionally, it is considered that the subject-matter of claim 1 is not inventive over the disclosure of D3 (see page 11, lines 23-29 and Fig. 1) which discloses a circuit (circuit 16, Fig. 1) comprising removable, reflection free terminations. Although D3 does not mention the type of transmission lines used in circuit 16, circulators in integrated circuits comprising microstrip transmission lines are well known in this technical field, and the implementation of the circuit of D3 in such a technology is not considered inventive.

Finally, the applicants' attention is drawn to the fact that the term "removable" qualifying a termination in a microwave circuit does not appear to have a limiting effect, since any termination may be removed, even if this is not specifically foreseen, by using a destructive, i.e. non reversible method. Thus, it appears that the use of the term "removable" in a claim directed to a device comprising a termination does not limit the scope of the claim.

- 2.2 Concerning the method claim 11, it is also considered that it does not involve an inventive step over the combination of documents D1 and D2, for the reasons put

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 03/02712

forward in the preceding point.

3. Dependent claims 2-10 and 12-22 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows:

- Claims 2-6, 9, 13, 14, 16-21: the additional features of these claims are present in D1, D2 or D3.

- Claims 7, 8, 10, 12, 15, 22: the additional features of these claims are not considered to contribute to the inventive step, since they appear to relate to standard modifications that the skilled person would apply according to the circumstances and within the framework of his/her daily routine.

4. The following points are drawn to the Applicants' attention:

a) Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 above is not mentioned in the description, nor are these documents identified therein.

b) The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

c) The last paragraph on page 12 of the description should be deleted, since it contains merely irrelevant and unnecessary statements (Rule 9.1 (iv) PCT).